

GOLDAT, S. Yu.

"A new case of Bar mutation." Department of Genetics (Chief: N. P. Dubinin), Institute of Experimental Biology (Dir: Acad. N. K. Koltsov), Ministry of Health, Moscow (p. 621) by Dubinin, N. P.; and Golbat, S. Yu.

SO: Biological Journal (Biologicheskii Zhurnal) Vol. V, 1936, No. 5

USSR/Microbiology - Antibiosis and Symbiosis. Antibiotics.

F-2

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9843

Author : Alikhanyan, S.I., Goldat, S.Yu., Klepikova, F.S.,
Mindlin, S.Z.

Inst : -

Title : Utilization of Ethylenimine in Selection of Strains of
Penicillin Producers.

Orig Pub : Antibiotiki, 1957, 2, No 1, 33-36

Abstract : In treatment of *Penicillium chrysogenum* spores by solutions of ethylenimine a considerable morphological variability in degree of sporulation, form, size, wrinkling and colony coloration was noted among the surviving colonies. White, beige and lettuce-colored variants were isolated, and also variants without pigments, which did not form a golden-yellow pigment. Among colonies which survived after treatment of spores of strain D 2/3 P. *chrysogenum* by ethylenimine, a separation was conducted

Card 1/2

20-5-45/54

AUTHORS: Alikhanyan, S. I., Gol'dat, S. Yu., Teteryatnik, A. P.

TITLE: The Mutation Effect of a Combined Action of Ethylenimine and Ultra-violet Rays upon Actinomycetes (Mutatsionnyy effekt kombinirovannogo deystviya etilenimina i ultravioletovykh luchey na aktinomitsety)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 5, pp. 1015 - 1017 (USSR)

ABSTRACT: Swanson proved in 1946 that the frequency of mutation of Aspergillus terreus and Neurospora crassa increases more intensively after the treatment of their spores with small doses of bis-B-chlorethylmethylemine, if they are subsequently exposed to violet rays, than by an exposure to ultra-violet rays solely. It was therefore presumed that the environmental factors can produce an effect upon the sensitiveness of the cell with respect to the radiated energy, viz. that the frequency of mutation is not only a function of the absorbed energy. This induced the authors to study the effect of the combined action of ethylenimine- and ultra-violet rays upon various actinomycetes. They used Strepto-

Card 1/4

20-5-45/54

The Mutation Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
upon Actinomyces

Myces aureo faciens No 112 and Str. griseus LS-1 (Actinomyces globisporus streptomycini). Both ethylenimine and a series of its derivatives show an effective "cytotoxic" action. Part of the initial spore suspension of the first-mentioned kind of fungus was kept during 5 and 20 hours (respectively) in solutions of ethylenimine of various concentrations (1 : 5000 to 1 : 8000) and was subsequently exposed to rays. An other part of the suspension was first exposed to rays and subsequently treated with ethylenimine solution (as above). The test in respect to the produced effect upon the vitality are given in table 1. It may be seen from this that the decay of spores as a consequence of their exposure to rays, increases intensively, provided that they were subject to a previous treatment with ethylenimine - compared with their mortality in case of an inverse sequence of the said factors. The vitality of the spores also decrease 50 times by their exposure to rays solely, if their dose has been increased from 2000 to 10.000 erg/mm². It falls 80 times, if the spores are first exposed to rays and subsequently treated with ethylenimine, - viz.

Card 2/4

20-5-45/54

The ~~Mutation~~ Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
upon Actinomycetes

only four times, - and with an inversed sequence of the factors (concentration 1 : 5000). The results obtained with Str. griseus were similar (analogous). The test results in respect to the frequency of mutation of the latter fungus in case of a combined action, when ethylenimine was applied first, are given in table 2. This frequency rises rapidly in the case of the latter sequence of treatments. The same results were obtained with Str. aureo faciens. As to the mechanism of the rapid rise of the frequency of mutations which were induced by ultra-violet rays, it may be assumed that the sensibilization of the cells against ultra-violet rays increases under the effect of ethylenimine. By this, the action of the ultra-violet rays upon the nucleus is intensified. It may also be presumed that these rays excite the molecule ethylenimine and by this abruptly increase its reactivity. There are 2 figures, 2 tables and 1 Slavic reference.

Card 3/4

20-5-45/54

The **Mutation** Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
upon Actinomycetes

ASSOCIATION: **All-Union** Scientific Research Institute for Antibiotics
(Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)

PRESENTED BY: I.L. Khunyants, Academician , March 18, 1957

SUBMITTED: March 16, 1957

AVAILABLE: Library of Congress

GOL'DAT, S.Yu.

Induced and natural variability of *Streptomyces aureofaciens*
[with summary in English]. Antibiotiki 3 no.4:14-18 JI-Ag '58
(MIRA 11:10)

1. Laboratoriya selektsii Vsesoyuznogo nauchno-issledovatel'skogo
instituta antibiotikov.
(STREPTOMYCES)

17 (1)
AUTHORS:

Gol'dat, S. Yu., Alikhanyan, S. I.

S07/20-125-5-49/61

TITLE:

The Effect of the Combined Application of Ultraviolet and X-Rays Upon the Mutagenic Process in *Streptomyces aureofaciens* LS-B16 (Vliyaniye kombinirovannogo deystviya ul'trafiioletovykh i rentgenovskikh luchey na mutatsionnyy protsess u *Streptomyces aureofaciens* LS-B16)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5, pp 1134-1136 (USSR)

ABSTRACT:

The mutagenic effectiveness of the rays mentioned in the title can be modified by several additional factors and conditions which influence the sensitivity of the cells to the radiant energy (Refs 1-5 et al). In this connection it was interesting to clarify the effectiveness of the interaction between these two kinds of rays and to determine whether irradiation with one of these factors influences the mutagenic effect of the other one. The fungus mentioned in the title, a biomycine producer which had been obtained by the authors due the combined application of the two aforementioned kinds of rays to the spores of the phylum LS-B536, was used for this purpose. Ultraviolet rays were produced by two bactericide

Card 1/4

Ultraviolet and X-ray "C" Diffraction Studies in Streptomyces aureofaciens LS-816

[illegible]

211220

S/560/61/000/010/01 1976
D208/D302

AUTHORS: Glembofskiy, Ya. L., Prokof'eva-Bel'govskaya
A. A., Shamina, Z. B., Goidan, S. Yu.,
Khvostova, V. V., Valeva, S. A., Eryes, N. S.,
and Nevzgodina, L. V.

TITLE: Effect of cosmic flight factors on the heredity
and development of actinomycetes and higher
plants

SOURCE: Akademiya nauk SSSR. Iskusstvennyye sputnik
Zemli no. 10. Moscow 1961. 72-8.

TEXT: The second cosmic space-ship was utilized to study
the combined genetic effect of cosmic flight on organisms. This
article deals with the study of the following cultures: actino-
myces erythreus, stems 2577 and 3594, and actinomyces strepto-
mycini Kras., stem 4003 (LS-3). After the cosmic flight, the

Card 1/4

Effect of cosmic

S/560/61/000/010/011/016
D298/D302

standards and experimental cultures were investigated according to: (1) vitality and (2) a microscopic characteristic of growth and development. The 2577 and 8594 stems differ by the sizes of their nuclear element in the spore and by their sensitivity to ultra-violet rays (UV). It is also assumed that they differ in their reaction to ionizing radiation. All the 4 tested stems were found to be sensitive to conditions of cosmic flight. The vitality (i.e., the number of spores which survived and developed colonies) of the radio-resistant act. erythraeus 2577, as compared to the standards, increased 6 times; the no. 8594 decreased 12 times; the act. aureofaciens 8594-220 (LSB-220) dropped in vitality by about 75% on the average. In the roots of all 5 types of experimental seeds, the percentage of chromosome changes was somewhat increased. However, only in the case of 2 types was this increase statistically valid. In 3 types of plants, an increase of mitosis was noted. In the case where the percentage of anaphases with chromosome changes was found

Card 2/4

Effect of cosmic

S/560/51/000/C10/011/016
D298/D302

to be high (about 5%), the tempo of mitosis fell. The conditions of cosmic flight stimulated the growth intensity compared to the standards. The following microscopic morphology features of the experimental cultures confirm this fact: (a) development of a more basiphyllic and powerful gif, (b) growth of a thicker intertwining of mycelia, (c) lengthy growth of well-developed gifs. Data on the survival of the 8594 and 2577 stems are not completely valid since the concentrations of the spore suspensions of the control and experimental cultures were determined visually from the suspension turbidity. The morphology changes in the colonies were investigated on the act. erythreus 8594 and act. aureofaciens LSB-2201. Obtained data show that the morphology changes in the actinomyces, both in the experiment (cosmic flight) and control, lie within the same limits. The cytology analysis of agricultural plant seeds affected by cosmic flight was conducted by studying the chromosome impairment in the ana- and telophases of the first mitosis. Obtained results.

Card 3/4

Effect of cosmic

S/560/61/000/10/01/014
D293/D302

showed that in all the investigated plants there is a certain increase of cells with chromosome changes, and in early 2 winter wheat and Spartan's peas--is this increase statistically valid. There are 4 figures, 2 tables and 5 references. 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: S. B. Pipkin, W. K. Sullivan, Aerospace Med. 30: 585, 1959.

SUBMITTED: May 3, 1961

Card 4/4

GOL'DAT, S.Yu.

Selection of *Actinomyces aureofaciens* (chlortetracycline producer)
by the use of mutagenic factors. Trudy Inst. mikrobiol. no.10:
159-163 '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ACTINOMYCETES) (AUREOCYCIN)

GOL'DAT, S.Yu.

Dependence of the effect of combined treatment of *Streptomyces aureofaciens* by ultraviolet and X rays on the nature of treatment. Dokl. AN SSSR 139 no.1:219-222 J1 '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov Ministerstva zdravookhraneniya SSSR. Predstavleno akademikom V.N. Sukachevym.

(ACTINOMYCES) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)
(X RAYS--PHYSIOLOGICAL EFFECT)

TETERYATNIK, A. F.; GOLDAT, S. Yu.; MIKHAYLOVA, G. R. ; KOZACHENKO, V. I.

"Investigation of the action of penicillin on antibiotic-producing actinomycetes."

report submitted for Antibiotics Cong, Prague, 15-1 Jun 64.

A.I.-Union Sci Res Inst of Antibiotics, Moscow.

ACCESSION NR: AP4020809 S/0297/64/009/002/0126/0129

AUTHOR: Gol'dat, S. Yu.; Sokolova, R.V.

TITLE: Combined action of ultraviolet radiation and ultrasonic oscillation on *Act. aureofaciens* spores

SOURCE: Antibiotiki, v. 9, no. 2, 1964. 126-129

TOPIC TAGS: ultraviolet radiation, ultrasonic oscillation, combined action, radiation and oscillation action sequence, *Act. aureofaciens* spores, spore viability, spore variability, antibiotic production activity

ABSTRACT: Several previous studies have shown that ultraviolet radiation causes chromosome lesions and reduces the action of ultrasonic oscillation, while other sources show that ultrasonic oscillation increases chromosome movement. The present study was made to determine the combined effect of these two factors on the viability and variability of *Act. aureofaciens* spores. In one series of experiments the spores were first ultraviolet-irradiated with 2000 or 4000 erg/mm² doses and then exposed to ultrasonic oscillation (no details given). In the second series the order of these actions was

Card

1/3

ACCESSION NR: AP4020809

reversed. The effect of each action by itself was studied in control groups. Survival and antibiotic production activity of the spores served as indices. It was found that with the combined action of ultraviolet radiation and ultrasonic oscillation both viability and variability of Act. aureofaciens spores are affected by the sequence of the actions. When spores are exposed only to ultrasonic oscillation, the number of low-activity variants sharply decreases. The number of low-activity variants decreases when the spores are exposed to ultraviolet irradiation after ultrasonic oscillation. But when the spores are exposed to ultraviolet irradiation first and then to ultraviolet oscillation, the number of high-activity variants increases and the number of low-activity variants decreases. This confirms literature data that preliminary ultraviolet radiation reduces the effects of ultrasonic oscillation. The combined action of ultraviolet radiation and subsequent ultrasonic oscillation may be useful in selecting antibiotic producers and developing highly active strains. Orig. art. has: 1 figure, 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva (All-Union Scientific-Research Institute of Antibiotics)

Card

2/3

SOLUBLE, WHITE, CRYSTALLINE; L.A.M. NO.

Induced and internal variation in *A. baumannii* (type strain ATCC 35061) and *S. enteritidis* (which produces a virulence factor β -hemolysin) are discussed.

1. The following information is for your information only:

GOL'DAT, S.Yu.

Effect of water radiolysis products on the viability and
variation of spores. Dokl. AN SSSR 154 no.2:457-459 Ja'64.

(MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skly institut antibiotikov.
Predstavleno akademikom Yu.A. Orlovym.

GOL'DAT, S.Yu.; SOKOLOVA, R.V.

Combined effect of ultraviolet rays and ultrasonic oscillations
on actinomyces aureofaciens spores. Antibiotiki 9 no.2:126-129
F 54. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,
Moskva.

... ..
... ..
... ..

... ..
... ..

BRLOP, L.A.; KOLVA, L.A.; GOL'DAT, S.Yu.; SAMOKHIN, G.T.

1. Different types of...
2. ...
3. ...

... ..

ACC NR: AP6035879 (R, N) SOURCE CODE: UR/0413/66/000/020/0104/0104

INVENTOR: Gol'dat, S. Yu.; Sokolova, R. V.; Firsova, A. F.; Kadakova, L. P.; Parfenova, A. I.; Karakishisheva, T. I.; Stepanova, N. V.

ORG: none

TITLE: *Actinomyces aureofaciens* strain LSB-181, producing chlortetracycline and tetracycline. Class 30, No. 187242. [Announced by All-Union Scientific Research Institute for Antibiotics (Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 104

TOPIC TAGS: antibiotic, drug, *Actinomyces aureofaciens*, chlortetracycline, tetracycline

ABSTRACT: An Author Certificate has been issued for strain LSB-181 of *Actinomyces aureofaciens*. Light-sensitive mycelia in 5—6 mm colonies appear on its tenth day of growth on no. 12 organic agar medium at 28C. On no. 11 synthetic medium, dirty-white colonies 2.5—3 mm in diameter appear, and on pea medium, brown, raised, wrinkled, as porulating colonies seven mm in diameter are found. Milk is completely peptonized on the tenth day, and coagulation is noted on the 15th day, at which

Card 1/2

UDC: 615.45:615.779.931

GOLDAYEV, A.D., inzh.

Installation of equipment of electric rail circuits. Pat' 1 put.
khaz. no. 2:34. P. 158. (MIRA 11:3)
(Railroads--Signaling--Block system)

GOLDAYEV, A.D., inzh.

Installation and maintenance of forked track circuits. Put' i put.
khoz. no.3:37-38 Mr '58. (MIRA 11:4)
(Electric circuits) (Railroads--Track)

SOV 124 58-11 12-77

Translation from: Referativny zhurnal Mekhanika 1958 Nr 11, p 76 (USSR)

AUTHOR: Goldayev, I. P.

TITLE: Optimal Parameters of the Combustion Process in Liquid-propellant Rocket Motors (Optimal'nyye parametry protsessy sgeraniya zhidkostno-raketnykh dvigatel'nykh)

PERIODICAL: Tr. Khar'kovsk. aviats. inst., 1957, Nr 17, pp 261-274

ABSTRACT: A thermodynamic calculation was made of the combustion process of various fuels (kerosene, gasoline, ethyl alcohol, hydrazine, aniline, liquid hydrogen) in combination with liquid oxygen and nitric acid. The results obtained permit a series of conclusions to be made such as the following: For every pressure in the combustion chamber there is a corresponding optimum excess oxidant coefficient α at which the maximum temperature is attained; as the pressure increases, the optimum value of α tends towards unity, which is explained by the suppression of dissociation at high pressures. The specific thrust of the rocket has its maximum value also at a well defined value of the coefficient α ; however, the optimum value of α for maximum specific thrust is considerably less than the

Card 1/2

SOV 124-58 11 12477

Optimal Parameters of the Combustion Process in Liquid propellant (cont.)

optimum value of α for maximum temperature, which is explained by the dependence of the molecular weight of the combustion products and the adiabatic exponent upon the excess-oxidant coefficient. The higher the heat value of the fuel, the lower is the magnitude of the optimum values of the excess-oxidant coefficient. In working with widely-known fuels and oxidants the most efficient pressure in the combustion chamber lies between 20 and 50 kg/cm².

A. B. Ezrokov

GOLDAYEV, I.P.; POLEVICHEK, Ye.P.; POPOV, N.N.; PERSMIN, A.P.

Jet piercing of hard rocks. Biol. tekhn.-ekon. inform. no. 4:3-4 '58.
(Rock drills) (MIRA 11:6)

S/147/59/000/04/020/020
EO31/E413

AUTHOR: Zolotukhin, V.K.

TITLE: The Scientific-Technical Conference at Khar'kov
Aviation Institute

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatсионnaya
tekhnika, 1959, Nr 4, pp 161-165 (USSR)

ABSTRACT: In May 1959, the 16th Conference of Professorial and Teaching Staff took place. At a plenary session the following reports were read: "The XXI Congress of the Communist Party of the Soviet Union on the Further Development of the Two Forms of Socialist Ownership" by N.N.Aleksandrov, Director of the Chair Marxism-Leninism; "The Contemporary State of Rocket Technology", by Docent, Candidate of Technical Sciences I.P.Goldayev; "Efforts to Produce the First Aircraft Wholly Manufactured in China" by Docent, Candidate of Technical Sciences S.I.Kuz'min. The work of the Conference continued in twelve sections.
Social Sciences Section The following papers were read: "Contemporary Bourgeois Philosophy" by Senior Instructor S.I.Epshteyn; "Discussion on Trade Unions in the

Card 1/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Khar'kov Party Organization" by Assistant A.G.Levchuk;
"The Solution of the Housing Problem Under Socialism"
by Senior Instructor in the Department of Economical
Sciences, V.A.Yakovenko, "The Final and Complete
Victory of Socialism in the USSR" by Senior Instructor
V.A.Kravets, "The Problems of Socialist Competition at
the XII Congress of the Trade Unions of the USSR" by
Assistant Yu.N.Doroshenko.

Foreign Languages Section. The following papers were read:

"Foreign Languages in the Life and Work of V.I.Lenin"
by Docent, Candidate of Philological Sciences
G.G.Pochentsov: "The Organization and Work of the
Departmental Section of Foreign Language Teachers at
Colleges which are not Specifically Language Colleges"
by Senior Instructor N.S.Shneye; "Work on Translations
at Higher Technical Colleges" by Assistant V.I.Kryzhenko;
"On the Principles of Constructing a Handbook of Technical
Texts - Educational Assistance for III-rd Course at
Aviation Colleges" by Assistants A.M.Gurevich and
L.A.Litovskaya

Card 2/11

S/147/59/000/04/020/020
EO31/E413

The Scientific-Technical Conference at Kharkhov Aviation Institute

Mathematics and Mechanics Section. The following papers were read: "A Spectral Representation of the Theory of Axisymmetric Turbulence" by Candidate of Physical and Mathematical Sciences G.M.Taranova; "Some Evaluations for Functions with Positive Real Parts" by Assistant G.S.Shpak; "Existence, Uniqueness and Correctness Theorems for Mixed Systems of Functional Equations" by Docent, Candidate of Physical and Mathematical Sciences M.N.Tikhov; "On the Application of Boll and Chebyshev Points to the Solution of Some Problems in the Synthesis of Four Bar Linkages" by Docent, Candidate of Physical and Mathematical Sciences Ya.I.Geronimus; "The Influence of the Structural Properties of Functions on the Convergence Almost Everywhere of their Conjugate Fourier Series" by Docent, Candidate of Physical and Mathematical Sciences B.I.Golinskiv.

General Technological Section. The following papers were read: "The Relation Between the Compton Length of Waves, the Length of de Broglie Waves and the Acceleration

Card 3/11

✓

S/147/59/000/04/020/020
EO31/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Potential for High Energy Particles" by Docent,
Candidate of Physical and Mathematical Sciences
I.Ya.Mints; "The Problem of Determining the Heat
Transfer Coefficient of Conductors" by Senior Instructor
P.P.Bezuglov; "An Electron-Graphical Method of
Investigating the Structure of Matter" by Assistant
I.Ya.Surovtsev; "On the Results of the VIIIth
Mendeleyev Congress of Chemists of the USSR" by
Docent, Candidate of Chemical Sciences E.I.Krech.
Electrical and Radio Technology Section. The following
papers were read, "On the Problem of the Optimum
Passage of Transients in an Electric Drive with a
Controlling Exciter" by Docent, Candidate of Technical
Sciences M.M.Perel'muter; "The Experimental Determination
of the Reactances in Synchronous Machines" by Senior
Instructor S.V.Khmel'nitskiy; "An Experimental Method
of Investigating Electric Fields" by Assistant
A.I.Lopatin; "A Discrete Transformer of Current into
Code Signals with Magnetic-Electric Comparison Units" by
Docent, Candidate of Technical Sciences G.M.Butayev; ✓

Card 4/11

S/147/59/000/04/020/020
EO31/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

"The Application of Infrared Instruments^s in Aviation"
by Docent, Candidate of Technical Sciences I.D.Artamonov.
General Engineering Section.

"The Adaptation of a Thermobaric Chamber to the
Simulation of the Sinking of a Mine Shaft in Quicksand
and Certain Results of Investigations to Determine the
Mechanical Characteristics of Sand at Different
Temperatures and Humidities" by Docent, Candidate of
Technical Sciences S.V.Blyashenko; "Friction and
Abrasion in Cermets" by Docent, Candidate of Technical
Sciences O.I.Goldayeva; "The Construction of Multi-
Satellite Planetary Gears"¹ by Assistant V.A.Tkachenko;
"The Influence of Work Hardening^b on the Fatigue¹ of
Threaded Connections" by Assistant V.M.Rydchenko;
"Investigation of Cermets Slide Bearings"¹ by Assistant
A.S.Efoyan.

Strength of Aircraft Section.

"On the Theory of Bending of Thin-Walled Columns" by
Docent, Candidate of Technical Sciences L.P.Vinokurov;

"The Simulation of Static Experiments on Thin-Walled

Card 5/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Structures" by Candidate of Technical Sciences
L.A.Kolesnikov and Senior Instructor V.K.Zolotukhin;

"The Bending of Beams Framing an Opening" by
Candidate of Technical Sciences L.A.Kolesnikov;

"The Influence of the Rigidity of Ribs and Beams on
their Bending" by Assistant N.A.Shelomov; "The
Calculation of the Bending of Rectangular Plates by
the Discrete Method" by Assistant Yu.P.Petrov;

"The Calculation of Cylindrical Shells" by the Method
of Discrete Variables" by Aspirant N.I.Gur'yev.
Engine Construction Technology Section.

"The Choice of a Scheme for a Hydraulic Servo-System
for the Automation of Welding Processes" by Assistant
V.V.Balatskiy; "An Investigation of the Process of
Polishing by an Abrasive Belt" by Senior Instructor,
Candidate of Technical Sciences V.N.Verezub; "The

Investigation of the Operation of a Pneumatic-
Hydraulic Plant" by Assistant V.I.Basteyev;

Card 6/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

"A Static Analysis and Calculation of the Accuracy of the Technological Processes of Machining" by O.M.Parkhomenko; "The Automatic Welding of Long Panels" by Candidate of Technical Sciences L.F.Kamakov; "Prospects in the Use of Specialised Computers for the Determination of the Optimum Geometry of Cutting Tools" by Docent, Candidate of Technical Sciences V.P.Kosharnovskiy; "The Spreading of the Experience of Innovators and the Classification of Organizational-Technical Measures in Machine Construction" by Senior Instructor M.M.Apanovich; "Features of Measurable Abrasion of a Cutting Tool in Fine Sharpening" by Assistant V.N.Malikov; "An Investigation of the Process of Compression at High Velocities of Deformation" by Docent, Candidate of Technical Sciences A.K.Bayev; "The Standardization of Vibration Effects on the Human Organism in Aircraft Production" by Senior Instructor V.D.Ivanov.
Theory and Construction of Aircraft Engines and Propellor-Driven Machines Section. "The Investigation ✓

Card 7/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

of the Flow Between the Inlet and Outlet Valves of a Turbine" by Instructor, Candidate of Technical Sciences V.N.Yershov; "The Variation in the Stage Parameters of an Axial Compressor in Accordance with the Size of the Radial Clearance" by Assistant A.N.Anyutin; "On the Problem of Non-Stationary Heat Transfer" by Assistant S.D.Prolov; "The Influence of an Electric Field on the Flame of a Burner" by Senior Engineer P.P.Kostenko; "Calculation of the Temperature Compensation of Capacitance Pressure Pick-Ups" by Assistant L.Ya.Astaf'yev.
Aerohydrodynamics Section.

"Ideal Hypersonic Flow Round a Body" by Assistant V.I.Kholyavko; "The Control of the Boundary Layer of a Wing by Perforation of the Leading Edge" by Assistant Ye.P.Vachasov; "The Gas-Hydraulic Analogy and its Application" by Senior Instructor D.A.Munshtukov; "The Aerodynamic Investigation of Wing Profiles for Small Reynolds Numbers" by Engineer Yu.F.Usik.

The Technology of Aircraft Construction and Metal Working Section. "A New Model of the Plasticity of Metals" by ✓

Card 8/11

S/147/59/000/04/020/020
EO31/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Instructor, Candidate of Technical Sciences
Yu.N.Alekseyev; "The Forging Extrusion⁶ of Large
Components from Sheet Metal" by Aspirant A.P.Barsukov;
"On the Problem of Constructing Second Order Curves in
Aircraft Construction" by Senior Instructor
M.A.Zaydenvarg; "The Electric Contact Welding⁶ of Thin
Pieces of Metal" by Assistant N.M.Tarasov; "The Influence
of Plastic Deformation on the Properties of Austenitic
Stainless Steel at Various Temperatures" by Assistant
N.V.Pisareva; "The Deformation of Non-Ferrous Metals
and Alloys at Low Temperatures" by Assistant
N.N.Lyulicheva; "The Investigation of Phase Changes in
Austenitic Steels Previously Deformed at Below Freezing
Point Temperatures" by Candidate of Technical Sciences
A.N.Chukhleb and Aspirant V.P.Martynov; "The Influence
of the Temperature and Velocity of Deformation on the
Phase Changes of Austenitic Steels" by Candidate of
Technical Sciences A.N.Chukhleb and Fellow V.P.Martynov; ✓
"The Determination of Optimum Technical Grouping in the
Design and Production of Aircraft" by Assistant

Card 9/11

S/147/59/000/04/020/020
EO31/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Yu.A.Boborykin; "On the Use of Explosives in the Technology of Drop Forging" by Assistant K.I.Zaytsev; "Welding by Friction" by Assistant N.P.Ostrovskiy.
Structure of Aircraft Section.

"On the Problem of Protecting the Structure of Aircraft from Aerodynamic Heating" by Docent P.V.Dybkiy;

"Passive Methods of Protection from Aerodynamic Heating" by Candidate of Technical Sciences F.G.Yasinskiy;

"The Influence of the Parameters of a Thermally Isolated Packet on Heat Transfer Characteristics" by Assistant A.A.Kobylyanskiy;

"Aircraft Structures Made from Fibreglass Sheets" by Docent, Candidate of Technical Sciences S.I.Kuz'min;

"An Apparatus for Investigating Repeated Static Loading and High Temperatures" by Assistant L.A.Malashenko;

"The Approximate Calculation of the Weight Taking into Account the Technical Features of the Aircraft Structure" by Candidate of Technical Sciences L.D.Arson; "The Determination of Stresses in a Shell as a Result of Riveting" by Assistant

Card 10/11 Yu.G.Fursa; "The Ultrasonic Altimeter (Sounding Device)" ✓

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515610019-3
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R000515610019-3

GOLDAEV, I.P.; POLEVICHUK, Ya.P.; POPOV, N.N.; MOTORNIKO, A.P.; SFROGODSKIY,

Thermal drilling of frozen grounds. Bul. tekhn. ekon. inform.
no.9:9-11 '59. (MIRA 13:3)
(Boring--Cold weather operation)

GOLDAYEV, I.F., kard.tekhn.nauk; POLEVICHENK, Ye.P., inzh.; POPOV, N.N.,
inzh.; MOTORHENKO, A.P., inzh.; SEROGODESKIY, A.V., inzh.

Using reaction burners in working; frozen ground. Mekh.stroi.
16 no.11:21-23 N '59. (MIRA 13:5)
(Earthmoving machinery--Cold weather operation)

GOLDAIEV, Ivan Prokhorovich; POLEVICHEK, Yevgeniy Pavlovich; POPOV, Nikolay Nikolayevich; MOTORNIKO, Aleksay Petrovich; SERGGODSKIY, Al'bert Viktorovich; YAKHONTOV, A.D., otv.red.; SMOLDYREV, A.Ye., red.izd-va; LOMILINA, L.N., tekhn.red.; SHELYAR, S.Ya., tekhn.red.

[Using thermal methods in working frozen ground.] Razrabotka
merzlykh gruntov termicheskim sposobom. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po gornomu delu, 1960. 46 p. (MIRA 13:4)
(Frozen ground) (Boring)

GOLOVY, I., hand.tekhn.prikl., Inzh.; 1940, 1941, I., Inzh.

Thermal method of boring holes in frozen ground. Strof. i
dor. mash. 6 no.10:23-29 (1941). (LRA 14:11)
(Boring machinery)
(Frozen ground)

S/123/61/000/020/035/035
AC04/A101

AUTHORS: Goldayev, I. P., Yudin, A. I.

TITLE: Thermal cleaning of structure surfaces

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1961, 16, abstract
20Ts157 ("Mekhaniz. str-va", 1961, no. 2, 20-21)

TEXT: The Khar'kovskiy aviatsionnyy institut (Khar'kov Aviation Institute) has developed a new method of cleaning surfaces and designed a thermocleaning tool. The method is based on the use of a high-temperature and supersonic gas jet, produced by the thermocleaner operating on compressed air (6 atm) and gasoline (10 atm). The jet is directed onto the surface covered with a layer of organic matter at an angle of 40 - 70°. The effect of the jet is of short duration and the temperature of the surface layer generally does not exceed 100°C. The thickness of the layer being removed is 0.5 - 2 mm. The thermocleaner is 570 mm long, weighs 5 kg, gasoline consumption is 100 - 120 gram/min, air consumption 5 m³/min. The mean speed of the gas jet at the output is 800 - 1,000 m/sec, the operating temperature 750 - 800° absolute. Organic matter in cracks

and 1/2

S/123/61/000/020/035/035
AOX4/A101

Thermal cleaning of structure surfaces

3-5 mm wide are removed from a depth of 150 - 200 mm. Thermal cleaning is 3 times cheaper than manual cleaning. The authors present a description of the thermocleaner design and drawings.

Yu. Savvin

[Abstracter's note: Complete translation]

GOLDAYEV, I.P., kand.tekhn.nauk; POLEVICHEK, Ye.P., kand.tekhn.nauk;
POPOV, N.N., kand.tekhn.nauk; SEROGODSKIY, A.V., inzh.

Double cascade air-operated flame drill for rock drilling without
the use of oxygen. Shakht.stroi. 6 no.11:4-6 N '62. (MIRA 15:12)

1. Khar'kovskiy aviatsionnyy institut.
(Rock drills)

GOLDAYEV, I. [Holdaiev, I.], prof. (Khar'kov)

Thermal drill. Nauka i zhyttia 12 no.7:30-31 J1 '62. (MIRA 16:1)
(Rock drills)

ALL WITH, I.

"I'm not going to let you go," said the man. "I'll stay with you."

Report submitted to the U.S. Federal Bureau of Investigation by Special Agent, Dallas, Texas, 10/1/64.

Journal of Management Education 30(6)p. 789-804

07586-01 SWT(0)/DHT(0)/IMP(0) 30 1 1
ACC 100 APC010001

AUTHOR: Goldayev, I. P.; Pechkin, A. P.

CNO: None

CITATION: A study for experimental investigation of process which takes place during intense heating

SOURCE: Samokh, V. P. (ed.) "Vysokotemperaturnyye protsessy", No. 1, 1966, 13-14

TEXT CASE: Heating, in jet, for time, test chamber, reaction chamber is 1

ABSTRACT: The study is devoted to the problem of the process of intense heating of a substance in a jet of a gas. The effect of the initial temperature, the initial pressure, the initial density, the initial composition and the initial size of the substance on the process of intense heating is studied. The results of the experiments are presented. The study is devoted to the problem of the process of intense heating of a substance in a jet of a gas. The effect of the initial temperature, the initial pressure, the initial density, the initial composition and the initial size of the substance on the process of intense heating is studied. The results of the experiments are presented. The study is devoted to the problem of the process of intense heating of a substance in a jet of a gas. The effect of the initial temperature, the initial pressure, the initial density, the initial composition and the initial size of the substance on the process of intense heating is studied. The results of the experiments are presented.

L 07546-67

ACC NR: AP0030420

controls and signalling devices are on the horizontal panel. Separate supply systems are provided for air and oxygen. The unit has a single fuel supply system which may be used with various types of liquid fuel. The combustion chamber is water-cooled by an open system with a flow rate of up to 125 l/min at a pressure of up to 10-16 atm supplied by a valve-regulated gear pump. The recommended sequence of operations is discussed and it is shown that the thermal parameters of a gas jet may be determined in a single experiment without direct measurements in the jet. Orig. art. has: 3 figures, 4 formulas.

SUB CODE:21,20/ SUPP DATA: None/ ORIG REF: 001

GOLDAYEV, M., svershchik

Device for repairing dragline bucket chains. Ma stroi. Mosk.
2 no.7:24 J1 '59. (MIRA 12:10)

1.UM-22 trasta Mosstroymekhanizatsiya No.7.
(Excavating machinery--Maintenance and repair)

KOSTYUK, D.I.; GOLDAZEVA, O.I.; YAKOVLEV, Yu.V.; TRET'YAKOVA, A.M., red.;
TROFIMENKO, A.S., tekhnred.

[Manual for project work for course credit on the theory of
mechanisms and machines] Rukovodstvo k kursovomu proektiro-
vaniyu po teorii mekhanizmov i mashin. Khar'kov, Izd-vo
Khar'kovskogo ordena Trudovogo krasnogo znameni khar'kov. in.
A.M.Gor'kogo, 1959. 252 p. (MIRA 12:12)
(Mechanical engineering--Handbooks, manuals, etc.)

S/187/19/000/04/020/020
E031/2315

AUTHOR: Zolotarev, V.E.

TITLE: The Scientific-Technical Conference at Alap-kay
Aviation InstitutePERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsohnaya
tehnika, 1959, Nr 4, pp 101-105 (USSR)ABSTRACT: In May 1959, the 10th Conference of Professors and
Teaching Staff took place.

Mathematics and Mechanics Section. The following papers were read: "A Spectral Representation of the Theory of Acoustic Diffraction" by Candidate of Physical and Mathematical Sciences M. S. Gerasimov; "On the Evaluation of Functions with Positive Real Parts" by Assistant G. S. Nizhnik; "Existence, Uniqueness and Correctness Theorems for Mixed Systems of Functional Equations" by Docent, Candidate of Physical and Mathematical Sciences M. S. Tikhonov; "On the Application of the Method of the Finite Difference to the Solution of Problems in the Synthesis of Four Mathematical Systems" by Docent, Candidate of Physical and Mathematical Sciences Yuli-Geronimus; "The Influence of the Structural Properties of Functions on the Convergence of Almost Everywhere of their Conjugate Fourier Series" by Docent, Candidate of Physical and Mathematical Sciences M. S. Gerasimov.

General Technological Section. The following papers were read: "The Relation Between the Critical Length of Rods, the Length of de Broglie Waves and the Acceleration Potential for High Energy Particles" by Docent, Candidate of Physical and Mathematical Sciences V. M. Pivovarov; "The Problem of Determining the Heat Transfer Coefficient in a Turbine" by Senior Instructor P. P. Zolotarev; "An Experimental Investigation of the Structure of Matter" by Assistant I. Ya. Kuznetsov.

On the results of the VIIIth Mendeleev Conference of Chemists of the USSR by Docent, Candidate of Chemical Sciences F. I. Kiselev; "Electrical and Radio Technical Section. The following papers were read: "On the Problem of the Optimum Passage of Transients in an Electrical Circuit" by Docent, Candidate of Technical Sciences M. M. Zolotarev; "The Experimental Determination of the Reactances in an Inductive Machine by Senior Instructor V. M. Pivovarov; "An Experimental Method of Determining the Critical Frequency of a Cyclic System" by Assistant I. Ya. Kuznetsov; "On the Problem of the Optimum Passage of Transients in an Electrical Circuit" by Docent, Candidate of Technical Sciences M. M. Zolotarev.

Card 4/11

"The Application of Technical Sciences in Aviation" by Docent, Candidate of Technical Sciences I. D. Aronov; "General Engineering Section. The following papers were read: "On the Problem of the Optimum Passage of Transients in an Electrical Circuit" by Docent, Candidate of Technical Sciences M. M. Zolotarev; "The Experimental Determination of the Reactances in an Inductive Machine by Senior Instructor V. M. Pivovarov; "An Experimental Method of Determining the Critical Frequency of a Cyclic System" by Assistant I. Ya. Kuznetsov; "On the Problem of the Optimum Passage of Transients in an Electrical Circuit" by Docent, Candidate of Technical Sciences M. M. Zolotarev.

GOLDEACH, V.

"Photoelectric registration method for measuring the content of friction. Strojenství, Praha, Vol. 4, No. 7, July 1954, p. 554.

SO: Eastern European Accessions List, Vol. 2, No. 1, Nov. 1954, p. 1.

KOSTYUK, D.I.; GOLDAVEVA, O.I.; YAKOVLEV, Yu.V. Prinsipali
uchastiya: BOLOTOVSKI, I.P.; BOLOTOVSKIY, I.A.; BLOKIN,
V.E.; BAZILYANSKAYA, I.L., red.

[Manual for the preparation of a course project in the
theory of mechanisms and machines] Rukovodstvo k kursovomu
proektirovaniyu po teorii mekhanizmov i mashin. Izd. 2.,
10 pr. izd. Khar'kov, Izd-vo Khar'kovskogo univ., 1961.
165 p. (MIRA 18:6)

GOLDBACH, V.

AUTHOR: Václav Goldbach

CZECH/47-59-2-16/20

TITLE: Professor Doctor of Natural Sciences Zdeněk Horák
Celebrates his Sixtieth Birthday

PERIODICAL: Československý časopis Pro Fysiku. 1958, Nr 2,
pp 219-220

ABSTRACT: Bibliographical details are given on Professor Horák
who since 1945 has been Professor of Physics in the
Mechanical Engineering Faculty of the Technical
University, Prague. In 1953 he applied Bose statistics
on phonons and thus derived by a new method the Debey
Card 1/1 formula for the atomic heat of solids.
There is 1 photograph

SUBMITTED: November 14, 1958

GOL'DBAUM, A. Ya., inzh.

Circuit for starting up an electric power station with complete loss of voltage. Energetik 8 no.1:9-10 Ja '60.
(MIR, 13:5)

(Electric switchgear) (Electric power plants)

ROMANOV, V.A., kand.tekhn.nauk; GOL'DBAUM, I.Ya., inzh.

Determining steady phase errors in follow-up systems converting sinusoidal inputs into proportional variations of electric-motor rotation speed. Izv.vys.ucheb.zav.; prib. no.5:24-31 '58. (MIRA 12:6)

1. Leningradskiy politekhnicheskii institut im. M.I.Kalinina.
(Electric controllers)

S/119/60/000/CIC/CC7/C11
BO12/ECc1

9.7000

AUTHORS: Gol'dbaum, I. Ya., Engineer, Zakharov V. K., Candidate
of Technical Sciences, Trenkin, N. T., Engineer

TITLE: Telecommunication System for Special Digital Computers

PERIODICAL: Priborostroyeniye, 1960, No. 10, pp. 18-21

TEXT: This is a description of a telecommunication apparatus, which is used in a system of "centralized" computation and control of financial operations. The present work was carried out at the laboratoriya avtomatiki i telemekhaniki LPI im. M. I. Kalinina (Laboratory of Automation and Telemekhanics LPI imeni M. I. Kalinina) jointly with the skoye byuro po proyektirovaniyu schetnykh mashin (Design Office for the Planning of Computers). The mode of operation of this system is illustrated by a block diagram shown in Fig. 1. Ordinary blocks of computers were used for it. Fig. 2 shows the circuit diagram of the receiving and transforming apparatus, which is then described in detail. This circuit diagram is characterized by the transformer $Tp_1 (T_{12})$ which has a fer-

Card 1/2

... 11 1

1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

• • • • •

For the purpose of this study, the following hypotheses were formulated:

[illegible]

• • • • •

SECRET

S. 119/60 JCC/CAC 117 111
B. 116/3206

Telemetry system for special

the buffer storage cell 4 from where it is fed to 4, to receive the error from 1. The information in 7 is not erased thereby. The receiver and transformer device of the central machine 1 operates analogously to that of the transmitter machine AM. Only the most specific blocks of the system are described. Fig. 1 shows the circuit of the receiver and transformer device. It warrants the following: selection of the input pulses according to the amplitude; according to polarity and duration; the forming of two current pulse trains characterizing the code structure. Separation according to amplitude and polarity is carried out by the amplifier T_1 , T_2 forming the positive pulses, and the amplifier T_3 , T_4 forming the negative pulses. Due to the feedback (R_1 and R_2 respectively) these amplifiers have a relay characteristic and the voltage at their outputs do not depend on the amplitude of the input pulses, as the latter exceeds a certain value. To the collector circuits of the transistors T_1 and T_2 the differentiating transformers Tp_1 and Tp_2 are connected. These eliminate the fronts of the pulses, the latter preparing the blocking oscillators T_5 and T_6 for the selection of the pulse duration via the

part 116.

11/17/64
S/11/2, 11/17/64 11/17/64
B116/B206

Investigating system of a signal

and the circuit of the detector. The circuit of this circuit is the transformer T_1 (T_2) with a ferrite with a rectangular hysteresis loop, making it possible to obtain a signal at the output independent of the duration of the pulse at the input. The duration of the detection signal is determined by the parameters k_1 , k_2 and is directed to the potentiometer.

4
The signal pulses are previously inverted by the transformer T_3 and then applied to the input of the selector T_4 of the negative pulses. It is also the development of spurious information pulses at the output of the circuit, the blocking oscillators T_5 and T_6 operate in response to the output of the frequency dividing oscillators T_7 and T_8 , which in a normal state are blocked by means of the voltage U_{CK} and are only started by the main pulses. According to the amplitude, the spurious pulses are smaller by a multiple than the main pulses and are not able to start T_5 and T_6 . Part of shows the transmission device.

Part 4 of the

Telemetry systems for special...

3/11/61
BIO 1000

to eliminate the no-load losses and to increase the efficiency of the
transformers and tables.

1. The first...

2. The second...

3. The third...

4. The fourth...

5. The fifth...

6. The sixth...

7. The seventh...

8. The eighth...

9. The ninth...

10. The tenth...

11. The eleventh...

12. The twelfth...

13. The thirteenth...

14. The fourteenth...

15. The fifteenth...

16. The sixteenth...

17. The seventeenth...

18. The eighteenth...

19. The nineteenth...

20. The twentieth...

21. The twenty-first...

22. The twenty-second...

23. The twenty-third...

24. The twenty-fourth...

25. The twenty-fifth...

26. The twenty-sixth...

27. The twenty-seventh...

28. The twenty-eighth...

29. The twenty-ninth...

30. The thirtieth...

31. The thirty-first...

32. The thirty-second...

33. The thirty-third...

34. The thirty-fourth...

35. The thirty-fifth...

36. The thirty-sixth...

37. The thirty-seventh...

38. The thirty-eighth...

39. The thirty-ninth...

40. The fortieth...

41. The forty-first...

42. The forty-second...

43. The forty-third...

44. The forty-fourth...

45. The forty-fifth...

46. The forty-sixth...

47. The forty-seventh...

48. The forty-eighth...

49. The forty-ninth...

50. The fiftieth...

3:50
 3/14/61 1000/012.0-2.0
 DLO 10/61

The use of error ...

$$\|a_{\mu\nu}\| = \begin{vmatrix} a_{11} & a_{12} & \dots & a_{1\nu} \\ a_{21} & a_{22} & \dots & a_{2\nu} \\ \dots & \dots & \dots & \dots \\ a_{\mu 1} & a_{\mu 2} & \dots & a_{\mu\nu} \end{vmatrix}$$

+

where μ = the number of rows and ν = the number of columns. The expression becomes a single row matrix for series reading arrangement and a single column matrix for the parallel arrangement. On the introduction of additional symbols, the reading may be represented as an extension of the single row or column matrices. The number of these symbols depends on the number of symbols in the added information and on the number of errors being corrected. In reading the information from the memory of the system, the

Card 2/5

38502

1/11/71 000 012 029 037
2201 5707

The use of error ...

added and compared with those written in the $(j+1)$ -th row and $(j+1)$ -th column. If a single error has occurred then the row sum will be out of coincidence in the row with distorted element and in the column in which this element is distributed. Thus, the element appearing at the cross-section of a known row and of a known column must be corrected. This method makes it possible to correct more than one error, provided they are distributed in rows and columns of the same numerical order. Every row and column of the matrix may be coded and checked according to the methods of obtaining a code correcting a single, and detecting a double, error. Thus a large number of errors may be detected which are disposed at the vertices of a polygon formed by the matrix elements. From the point of view of reliability this method gives a high coding efficiency. Formulas permitting evaluation of efficiency of specific memory devices are derived. The problem of error correction methods and their effect on reliability is considered. (Abstractor's note: Complete translation.)

Card 3/3

S/119/62/000/010/001/003
D201/D300

AUTHORS: Gol'dbaum, I.Ya. and Zakharov, V.K.

TITLE: Interference-killing code for remotely controlled transmission systems

PERIODICAL: Priborostroyeniye, no. 10, 1962, 3-4

TEXT: The analysis of several codes shows that the code "2 from 5" has a relatively high interference immunity and can therefore be used for the transmission of information. Two types of converters of parallel 2 from 5 code into a series code, a converter of binary-decimal code into a series 2 from 5 code and a receiving converter of 2 from 5 code into an ordinary decimal code are described. One of the first two is a ferrite matrix with rectangular hysteresis loop. The other type utilizes the principle of "current steering". The latter is stated to have the advantage of having no pulses of complex shape at the output rails during the registration of the code being formed and that current pulses of considerable magnitude may be obtained (up to 1A with ferrite type ПП -24 (PP-24)). It

Card 1/2

Interference-killing ...

S/119/62/000/010/001/003
D201/D306

is stated that the circuits described can be used, after certain modifications, for designing other types of code converters. There are 2 tables and 3 figures.

Card 2/2

L 18967-65 EWT(d)/T/ENP(1) Pac-l/Pg-l/Pae-2/Fh-l/Pj-l/Fl-l IJP(c)/ASD(a)-5/
RAEM(c)/ESD(c)/ESD(dp)/ESD(gs)

ACCESSION NR: AR5000806

S/0058/64/000/010/H018/H018

SOURCE: Ref. zh. Fizika. Abs. 10Zh133

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Comparison of plane matrix codes

CITED SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 19, 1964, 88-96

TOPIC TAGS: communication coding, error detection coding

TRANSLATION: It is shown that of all the control matrices which are intended for the observation of random errors and information, the quadratic matrix is the most effective. The advisability of using code series with constant ratio as columns or rows of the controlling matrix is investigated. Recommendations are made concerning the formation of the most suitable variant of the control.

L 18967-65

ACCESSION NR: AR5000806

matrix.

SUB CODE: DP

0
ENCL: 00

L 45661-65 EED-2/EWT(d)/T/EWP(1) Pg-4/Pj-4/Pk-4/Pq-4 IJP(c) G3/B
ACCESSION NR: AR5011510 UR/0372/65/000/002/V059/V059

SOURCE: Ref. zh. Kibernetika. Sv. t., Abs. 2V382

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Concerning certain characteristics of matrix codes. 16C

CITED SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 20, 1964, 54-66

TOPIC TAGS: matrix code, binary code, error detection code, control matrix

TRANSLATION: The article considers binary codes with $n = n_1 \cdot n_2 \cdot \dots \cdot n_t$ information symbols of the following type. The information symbols are arranged in a spatial matrix M of order t and dimensionality $n_1 \times n_2 \times \dots \times n_t$. Further, a control matrix of order t and dimensionality $n = (n_1 + c_1)(n_2 + c_2) \dots (n_t + c_t)$ is set up by adding c_i control symbols in each row of the i -th direction ($1 \leq i \leq t$) of the matrix M in accordance with one and the same law. It is shown that the following statements hold:

L 45661-65

ACCESSION NR: AR5011510

Theorem 1. A control matrix of order t and dimensionality $(m_1 + c_1) \times (m_2 + c_2) \times \dots \times (m_t + c_t)$ with m information symbols and for fixed $m, t, c_1, c_2, \dots, c_t$ has the minimum possible number of control symbols if and only if

$$\frac{m_1}{c_1} - \frac{m_2}{c_2} - \dots - \frac{m_t}{c_t} \quad (1)$$

A control matrix satisfying relation (1) is called compact.

Theorem 2. Let two compact control matrices A and A' be of order t and $t + s$ and of dimensionality $(m_1 + c_1) \times (m_2 + c_2) \times \dots \times (m_t + c_t)$ and $(m'_1 + c'_1) \times (m'_2 + c'_2) \times \dots \times (m'_{t+s} + c'_{t+s})$, respectively, and let them have the following properties: 1) each contains m information symbols, i.e., $m = m_1 \cdot m_2 \cdot \dots \cdot m_t = m'_1 \cdot m'_2 \cdot \dots \cdot m'_{t+s}$; 2) $m_1 \geq c_1$ and $m'_1 \geq c'_1$ for $1 \leq i \leq t$ and $m'_i \geq c'_i$ for $t + 1 \leq i \leq t + s$. Then the matrix A' contains more control symbols than A . Some corollaries of these theorems are further derived. A. Korshunov.

SUB CODE: DP

ENCL: 00

Card 2/2 CC

GOL'DBAUM, I.Ya.

One feature of iterative codes. Radiotekhnika 20 no.2,
77.79 F '65. (MIRA 18:4)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi imeni Popova.

L 24274-66

ACC NR: AR6005247

SOURCE CODE: UM/0058/65/000/009/H012/H012

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Criterion for estimating error correcting codes 1

SOURCE: Ref. zh. Fizika, Abs. 9Zh87

REF. SOURCE: Tr. Nauchno-tekhn. konferentsii Leningr. elektrotekhn. in-ta svyazi,
vyp. 1, 1964, 99-106

TOPIC TAGS: error correcting code, data transmission, error correction

ABSTRACT: On the basis of a criterion that takes into account the efficacy with which redundancy is used for error detection, a choice is given for the length of the computer "word" for a data transmission system with passive correction.
[Translation of abstract]

SUB CODE 09

Card 1/1 *dda*

37
B

2

L 29584 66 INT() INF() PP
ACC NR: AM 21.591

SOURCE CODE: UR/0274/65/000/010/AC06/AC07

A INCR: Goldstone, J. L.

TITLE: On the efficiency of coding codes

SOURCE: RUS. J. Engng. Sci. Abs. 10A44

REF SOURCE: Vopr. Prikl. Matem. i Mekh. 1966, 1, 1, 1-4, 1-4
vyp. 1, 1, 1, 1-4

TOPIC TAGS: Coding theory; Error detection; Error correction

ABSTRACT: A method is proposed for a passive-correction-type data system. A criterion is introduced which takes into account the efficiency of using redundancy for error correction. The criterion is connected with an absolute actual efficiency, an absolute probability q of passing the symbol through the channel, and the number of words C which is transmitted. The criterion is also connected with the absolute probability of

appearance of errors. The redundancy R is $R = R_1 / (1 - q) + R_2 / (1 - q^2) + \dots$

In the course of the analysis of the formula $y = f(q, n, \theta)$, some conclusions are made about the efficiency of various combinations of these parameters.

The concepts of efficiency and efficiency of the coded-information protection are introduced. A table. Bibliography of 12 titles. L. S.

[Translation of article]

Card 1/1

UDC:621.391.152

533-03-001 INT(1) 00

ACC NR: AT6006271

SOURCE CODE: UP/0000/64/001/000-0059/0106

AUTHOR: Gol'dbaum, I. Ya.

ORG: none

TITLE: A criterion for the evaluation of error-detecting codes

SOURCE: Leningrad. Elektrotekhnicheskii institut svyazi. Nauchno-tekhnicheskaya konferentsiya. Trudy, no. 1, 1964, 99-106

TOPIC TAGS: error detecting code, error correcting code, coding evaluation

ABSTRACT: It is noted that the emergence of different codes featuring the detection and correction of errors has raised the question of the development of an engineering criterion which may be employed in an objective comparison of such codes. The expression proposed by the author for error-detecting code efficiency has the form

$$\eta = \frac{1}{R} \log \frac{1}{P_H} .$$

L 33303-66

ACC NR: AT6006271

where R is the redundancy of the code. The paper deals fundamentally with a data-transmission system with passive correction. Such a system provides for a considerable reduction in time losses entailed in re-interrogation of garbled information. On the basis of a criterion which takes into account the efficiency of redundancy utilization for error detection, the author justifies a selection of machine "word" length for an idealized data-transmission system with passive correction. Orig. art. has: 1 figure, 1 table, and 19 formulas.

SUB CODE: 09 / SUBM DATE: 08Dec64 / ORIG REF: 009 / OTH REF: 003


Card 2/2

16(1)

AUTHOR: Gol'dbaum, Ya.S. (Leningrad)

SOV/40-22-4-16/26

TITLE: On the Transformation of the Secular Equation (K preobrazovaniyu vekovogo uravneniya)

PERIODICAL: Prikladnaya matematika i mekhanika, 1958, Vol 22, Nr 4.
pp 537 - 541 (USSR)

ABSTRACT: Starting from considerations of the general theory of the integration of systems of linear differential equations Krylov gave a method of transferring the determinant

$$|A - \lambda E|$$

into a form, so that the characteristic exponent λ only occurs in the elements of one line. The algebraic performance of this Krylov transformation, however, was not very easy. In the present paper therefore an attempt is made to develop a new, completely elementary method for a transformation. The author states that this method represents the clearest and algebraically simplest one among the methods which became known in this domain.

If A is a real matrix of order n and x a real row vector,

Card 1/2

On the Transformation of the Secular Equation

70V/40-22-4-16/26

then by application of the row vectors :

$$x, Ax, A^2x, \dots, A^{n-1}x$$

and the matrix :

$$X = \|x, Ax, A^2x, \dots, A^{n-1}x\|$$

one can find a form :

$$|A - \lambda E| = \frac{1}{X} \begin{vmatrix} 1 & \lambda & \lambda^2 & \dots & \lambda^n \\ x & Ax & A^2x & \dots & A^nx \end{vmatrix}$$

for the secular equation. As it was required the characteristic exponent λ only occurs in the elements of the first line. This transformation is brought into a simpler form by another representation of the vector A^nx which can be also enlarged and applied to special cases.

There are 5 Soviet references.

SUBMITTED:

January 3, 1955

GOL'DBERG, A.; RYMKOVSKIY, A.

Improve the work of seed cleaning stations. Muk.-elev.prom. 20
no.10:8-9 0 '54. (MIRA 7:12)

1. Kiyevskaya normativno-issledovatel'skaya stantsiya Z gotzerna.
(Seeds Cleaning)

SAYENKO, G.; GOL'DBERG, A.

Simplified method for calculating the pay of stokers and
specialists in grain drying. Muk.-elev.prom. 26 no.7:17-19
Jl '60. (MIRA 13:8)

1. Zaveduyushchiy Kiyevskoy normativno-issledovatel'skoy stantsiyey
(for Sayenko). 2. Starshiy inzhener Kiyevskoy normativno-
issledovatel'skoy stantsii (for Gol'dberg).
(Grain--Drying) (Wages)

Belinskii, P. P., and Goldberg, A. A. Application of a theorem on conformal mappings to questions of invariance of defects of meromorphic functions. Ukrain. Mat. Z. 6, 263-269 (1954). (Russian)

An example is given of a meromorphic function of finite order for which the defect is not invariant under a translation of the origin; this answers a question raised by Valiron [C. R. Acad. Sci. Paris 225, 556-558 (1947), MR 9, 139]. If E is some set in $1 < r < \infty$, $\chi(l, E)$ the characteristic function of E , and αE the complement of E with respect to $1 < r < \infty$, it is said that $E \sim A$ if

$$\limsup (\log r)^{-\alpha} \int \chi(l, E) dr = \infty.$$

It is proved that, for a meromorphic function of finite order, the quantities

$$\sup_{\alpha E \sim A} \liminf_{r \rightarrow \infty} \frac{m(r, \alpha)}{T(r)} \quad \text{and} \quad \inf_{\alpha E \sim A} \limsup_{r \rightarrow \infty} \frac{m(r, \alpha)}{T(r)}$$

are invariant under translation. It is also shown that, in order that the defect (in the sense of either Nevanlinna or Valiron) of a meromorphic function be invariant under a pseudo-analytic transformation, it is sufficient that either $0 < K_1 < T(r)/r < K_2 < \infty$ or $0 < K_1 < N(r, \alpha)/r < K_2 < \infty$.
 A. J. Luhuaar (Helsinki).

1 7/W

8/W
 1.F.H

Goldberg, A.A.

Goldberg, A. A. On a problem in the theory of distribution of values of meromorphic functions. *Dopovidi Akad. Nauk Ukrain. RSR* 1954, 3-8 (1954). (Ukrainian. Russian summary)
Announcement of the results of the paper reviewed below.
A. J. Lokander (Helsinki).

11/2 ✓ Goldberg, A. A. On the inverse problem of the theory of the distribution of the values of meromorphic functions. *Ukrain. Mat.* 2, 6, 385-397 (1954). (Russian)
The author constructs a class of Riemann surfaces having a finite number of "almost periodic" ends in order to solve the problem of finding a meromorphic function having given defects $\delta(a_k)$ on a given sequence of points $\{a_k\}$. The restrictions on the $\delta(a_k)$ are that (1) $\sum \delta(a_k) < 2$, and (2) all but a finite number of the $\delta(a_k)$ are zero. This result extends the work of La Van Thiem [*Comment. Math. Helv.* 23, 26-49 (1949); *Ann. Sci. Ecole Norm. Sup.* (3) 67, 51-98 (1950); MR 11, 22, 12, 17], who required, in addition, that the $\delta(a_k)$ be rational.
A. J. Lokander (Helsinki).

LFH

8/10

GOL'DBERG, A. A.

USSR/ Mathematics - Analytical functions

Card 1/1 Pub. 22 - 3/47

Authors : Gol'dberg, A. A.

Title : The approach of algebraic branching points of a Riemann surface and its effect on the order of development of the mapped meromorphic function

Periodical : Dok. AN SSSR 98/5, 709-711, Oct 11, 1954

Abstract : The idea of a meromorphic function, which reflects (maps) a surface on a Riemann surface having n directly critical points, is explained. A class of critical points (K-points), much broader than the class of directly critical points, was introduced and their functions explained. The effect of approaching algebraic branching points of a Riemann surface, on the development of meromorphic functions, is analyzed. Six references: 1-USSR and 5-Japanese (1941-1943).

Institution : ...

Presented by: Academician M. A. Lavrentyev, May 20, 1954

USSR/Mathematics - Mero-morphic functions

Card 1/1 : Pub. 22 - 3/44

Authors : Gol'dberg, A. A.

Title : Defects of mero-morphic functions

Periodical : Dok. AN SSSR 98/6, 893-895, October 21, 1954

Abstract : A series of theorems are presented which intend to prove, by constructing a simple example, that a mero-morphic function of a fixed finite order may have any arbitrary finite number of defects. Eight references (1929-1952).

Institution :

Presented by: Academician M. A. Lavren'ev, May 29, 1954

1. DUBIN, A. A. "Special Problems of the Theory of the Distribution of Values of Functions in Groups." (Leningrad, 1964). 110 pages. 1964. 15 kopecks. (Leningrad, 1964). 110 pages. 1964. 15 kopecks.

...the

GOL'DBERG, A.A.

Single-valued integrals of differential equations of the first
order. Ukr. mat. zhur. a no. 1:254-261 '56. (MIRA 10:9)
(Integrals) (Differential equations)

1902-1903, A.S.

1. A. A. Ineqin is connected with logarithmic convex functions
[with acronym] in Russian and English]. Dop. Ak. USSR no.3:227-23
1957. (USSR 1957)

1. Ученый из ведущего университета. Представлен академиком Академии наук Б.В.Гусевым.

GOLDBERG, A. A.

20-2-3/60

AUTHOR: Gol'dberg, A. A.

TITLE: The Evaluation of the Sum of the Defects of a Meromorphous Function of the Order Smaller Than One (Otsenka sumy defektov meromorfnoy funktsii poryadka men'she yedinitsey)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 112, Nr 2, pp.245-246 (USSR)

ABSTRACT: The author here denotes with $\delta(a)$ the Nevanlinna defect in the point a of the meromorphous function in a finite z plane. R. Nevanlinna showed the following: For meromorphous functions of not full order ρ the sum $\delta(a) + \delta(b)$ is lower at all $a \neq b$ than a certain constant which is lower than 2 and depends only on ρ . The corresponding evaluations were also given by R. Nevanlinna. For the case $0 \leq \rho \leq 1$ S. M. Shah, Math. Student, Vol. 12, p. 67 (1944), gave precise data concerning the evaluations by Nevanlinna and showed that $\delta(a) + \delta(b) \leq 1 + \rho$ applies. The present report gives proof of the inequalities:

Card 1/2

20-2-3/60

The Evaluation of the Sum of the Defects of a Meromorphic Function of the Order Smaller Than One

$0 < \rho < 1/3$

$$\delta(a) + \delta(b) \leq \begin{cases} 1 \\ 2 - 2^{\rho} \sqrt{\pi} \Gamma(1 - (\rho/2)) \Gamma^{-1}((1 - \rho)/2), 1/3 < \rho < 1. \end{cases}$$

According to the opinion of the author this is a more typical evaluation than the one by S. M. Shah. Through probably the evaluation written down above is not one of the best, it may not be far from it. Proof is then carried out step by step. There 1 figure, and 7 references, 3 of which are Soviet.

ASSOCIATION: State University, Uzhgorod
(Uzhgorodskiy gosudarstvennyy universitet)

PRESENTED: December 7, 1956, by M. A. Lavrent'yev, Member of the Academy

SUBMITTED: September 8, 1956

AVAILABLE: Library of Congress

Card 2/2

SOV. 140-58-3-8/34

AUTHOR: Gol'dberg, I. A.
 TITLE: On Entire Solutions of Partial Differential Equations (0
 tselykh resheniyakh uravneniy s chastnymi proizvodnymi)
 PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958,
 Nr 3, pp 62-66 (USSR)
 ABSTRACT: The author considers entire solutions $u = u(z, w)$ of the
 equation

$$(1) P(z, w, u, \frac{\partial u}{\partial z}, \frac{\partial u}{\partial w}, \dots, \frac{\partial^q u}{\partial z^q}, \frac{\partial^q u}{\partial z^{q-1} \partial w}, \dots, \frac{\partial^q u}{\partial w^q}) = g(u),$$

where P is a polynomial and the coefficients are complex.
 Theorem: In order that (1) possesses an entire transcendental
 solution, it is necessary and sufficient that $g(u)$ is a poly-
 nomial, the degree of which is \leq the degree of P (concerning
 the totality of the arguments). If in particular the left side
 is linear in u and in its derivatives, then it must be $g(u) =$
 $= Au + B$.

The proof is based on some lemmata in which well-known proper-
 ties of simple power series are transferred to double series.

On Entire Solutions of Partial Differential Equations S07/140-58-3-8/34

There are 7 non-Soviet references, 4 of which are German,
2 French, and 1 English.

ASSOCIATION: Uzhgorodskiy gosudarstvennyy universitet (Uzhgorod State
University)

SUBMITTED: October 29, 1957

6(1)

AUTHOR: Gol'dberg, A.A.

307/21-11-2-12/17

TITLE: Remark on Blaschke-Products for the Halfplane

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1959, Vol. 11, Nr. 2
 pp 210-213 (USSR)

ABSTRACT: Let

$$B(z) = \prod_{k=1}^{\infty} \frac{1-a_k^{-1}z}{1-a_k^{-1}\bar{z}}, \quad a_k = r_k e^{i\theta_k}, \quad 0 < \theta_k < \pi, \quad r_k \rightarrow \infty, \quad \sum_{k=1}^{\infty} \frac{\sin \theta_k}{r_k} < \infty$$

and

$$m(r, f) = \frac{1}{2\pi} \int_0^{2\pi} \ln^+ |f(re^{i\varphi})| d\varphi.$$

Theorem: For all $r > 0$ it holds:

$$m(r, B) = O\left(r \left[1 + \ln^+ \frac{n(\lambda r) - n(\lambda^{-1}r)}{r}\right]\right)$$

where λ is an arbitrary number > 1 .

Theorem: In order that $m(r, B) = O(r)$ holds for all $r > 0$ the convergence of

Remark on Blaschke-Products for the Halfplane

807/41-11-2-12/17

$$\sum_{k=1}^{\infty} \frac{\sin \theta_k}{r_k} \ln \frac{2}{\sin \theta_k}$$

is sufficient.

A further theorem contains assertions on Blaschke-Products of finite order.

The author mentions B.Ya. Levin, and I. V. Ostrovskiy.

There are 3 references, 1 of which is Soviet, 1 German, and 1 French.

SUBMITTED: September 23, 1957 (Uzhgorod)

16(1)

AUTHOR: Gol'dberg, A.A. (Jzhgorod)

65785

SOV/11-11-4-10/18

TITLE: On the Set of Defect Numbers of Meromorphic Functions of Finite Order

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1959, Vol 11, Nr 4, pp 432-442 (USSR)

ABSTRACT: In his publication [Ref 1] the author constructed a meromorphic function of first order with infinitely many defect numbers. In the present paper a proof of [Ref 1] is completed (according to a hint of Professor B.Ya Levin) and a meromorphic function of arbitrary finite positive order ρ is constructed the set of defect numbers of which is identical with an arbitrary given finite or countable point set of the z -plane. There are 4 references, 1 of which is Soviet, 1 French, and 2 Finnish.

SUBMITTED: February 17, 1959

Card 1/1

GOL'DBERG, A.A.

Elementary comments on formulas for determining the order and
type of entire functions of several variables. Dokl. AN Arm.
SSR 29 .no.4:145-151 '59. (MIRA 15:4)

1. Uzhgorodskiy gosudarstvennyy universitet. Predstavleno
akademikom AN Armyanskoy SSR M.M. Dzhrbashyanom.
(Function of complex variables)

16(1)

AUTHORS: Bitlyan, I.F., and Gol'dberg, A.A.

SOV/43-59-13-3/16

TITLE: The Theorems of Wiman-Valiron for Entire Functions of Several Complex Variables

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1959, Nr 15 (4), pp 37-41 (USSR)

ABSTRACT: §1: On the base of the usual definition, the well-known theorems of Wiman on the connection between the maximal value of an analytic function and the greatest term are transferred to functions $f(z, w)$. It is stated that if the manner is not restricted in which the space is exhausted by the cylinders $|z| \leq r_1, |w| \leq r_2$, then the transfer can be made only under very incisive restrictions of the form of the double series (the transfer is not valid e.g. for polynomials!). In the §§ 2 and 3 it is stated that a better transfer of Wiman's results is possible if one restricts oneself to exhaustions of the type $|z| \leq Ar, |w| \leq Br$ and the notion of the highest term is somewhat